

Abstract of the Disclosure:

A substrate with a coating film formed thereon is covered with a cover member on the side of its principal surface. A solvent is supplied from the top of the cover member through a plurality of supply holes formed at predetermined positions of the cover member so that an unnecessary film portion of the coating film in a processed region is dissolved by the solvent and removed. In an unprocessed region except the processed region, a gap between an inner surface of the cover member and the surface of the substrate has a size such that temperature distribution is not caused in the coating film formed on the surface of the substrate under the influence of heat transfer from the cover member.